GERMAN WAR FINANCE—A REVIEW

NOTE: This article is based upon *Les Finances de Guerre de l'Allemagne,* by Charles Rist, Professeur à la Faculté de Droit de Paris. (Paris: Payot & Cie. 1921. Pp. 294. 15 fr.) Page references in parentheses, unless otherwise designated, refer to this volume.

No record of modern warfare is complete without an account of the part played by finance. Indeed, the whole complicated machine rests upon finance. It is by finance that the resources and energies of a nation are diverted from their normal channels and directed to the purposes of war. Never has this principle been so fully recognized and so consciously applied as by the Germans in the World War. In their careful preparation for war, finance was not overlooked. In the conduct of the war, financial successes were achieved and financial reverses suffered no less significant than those in the military field. And in the final disaster, financial collapse went hand-in-hand with military defeat. Certain financial achievements of the Germans must be acknowledged as nothing less than works of genius. On the other hand, financial blunders were made which at first sight are all but unbelievable. The record of Germany's war finance need only be properly written to furnish a story of profound significance and surpassing interest.

To say that Professor Rist has given us such a record is no exaggeration. That we have it thus early is especial matter for congratulation. The book has been written, not for the professional expert, but for the general reader. The discussion is simple and non-technical. It is based on original German sources, handled with scientific judgment and calm impartiality.

In the opinion of the reviewer, the best way to appraise this book is to make it the basis of a brief account of the war finance of Germany. This account will properly begin with an analysis of Germany's borrowing operations.

Scarcely a month from the beginning of hostilities the first war loan was made (September, 1914). After that the loans followed each other twice a year, in March and September, with a regularity and a constant success that are impressive. The ninth and last loan was made in September-October, 1918, in the very face of the military collapse. The first loan brought subscriptions of four and a half billion marks. The second doubled this amount. No loan thereafter fell below ten billions, the climax being reached by the eighth loan (March, 1918), which yielded nearly fifteen billions. Nearly 100

billion marks were thus obtained up to the end of 1918.[1] When it is recalled that in the Franco-Prussian war of 1870-71 Germany's total receipts from war loans were only 350 million marks, one begins to realize what progress the world has made in a generation and a half.

In no department of the German war effort was success so conspicuous as in the great war loans. The magnitude of this success was a surprise to everybody, including the Germans themselves. There was among the Allies during the war a tendency to belittle it, to charge that it was merely an illusion, the result of skilful but dishonest juggling. Nothing could be farther from the truth. If there was in connection with the German war loans anything in the nature of jugglery it was in no fundamental respect different from the practices of all the other belligerents (pp. 65-66).

One naturally asks, whence came these gigantic sums? In answer Professor Rist notes as the first and most obvious source the sale of foreign securities, a resource availed of by every belligerent. The mobilization and sale of foreign securities (particularly American) was quickly resorted to by the British government. France also was able to make good use of this resource (p. 197). The German position was not so strong. Whereas the people of England and France had before the war large investments abroad, Germany had use at home for most of her capital. Indeed, she was employing in her industries a very considerable contribution of foreign capital, particularly French. This situation was one of the elements of weakness in the German banking situation which dictated a pause in the Agadir crisis of 1911 and whose correction the Emperor is said to have demanded in no uncertain terms. The German statisticians estimated their total holdings of foreign securities at the beginning of the war at sixteen to twenty billion marks. A considerable part of this portfolio obviously was not realizable. The amount invested in the industries of Germany's allies, Austria-Hungary, Turkey, Bulgaria, and in Roumania was estimated at five billions (pp. 68, 198).[2] Investments in the enemy countries, France, England,

[1]The following table (p. 95) shows the amount of the subscriptions to each of the nine war loans:

First	loan	September, 1914	4,460 million marks
Second	"	March, 1915	9,060 " "
Third	"	September, 1915	12,101 " "
Fourth	"	March, 1916	10,712 " "
Fifth	"	September, 1916	10,652 " "
Sixth	"	March, 1917	12,978 " "
Seventh	"	September, 1917	12,457 " "
Eighth	"	March, 1918	14,766 " "
Ninth	"	September, 1918	10,433 " "
	Total		97,619 million marks

[2]*Cf.* also Keynes, *Economic Consequences of the Peace,* American edition, pp. 174-182.

Russia, Italy, were equally unavailable. They were estimated at seven or eight billions. This left only the Scandinavian countries, South America, the United States, and Japan. Investments in these countries, realizable in spite of the war, were calculated at seven or eight billion marks.

It is estimated that some three billions of these foreign securities were disposed of in the early years of the war. The German public was urged to this course by the government, speaking through the voice of the press and the bankers' propaganda with the slogan "fremde Effekten heraus." But by the latter part of 1916 the government policy had changed. In September it was decided to make use of the German-owned securities, not for sale, but, following the example of France and England, as security for foreign loans sought for the sake of sustaining the foreign exchanges (pp. 68-69).

Apart from the modest aid from such sources as this, Professor Rist finds the real foundation of the war loans in what he calls the "normal savings of war," permitting one to say with truth that "war supports war." He here brings to the fore a truth often overlooked by those who paint the picture of the awful economic waste of war. In the early years of the present century it was a common belief that the gigantic cost of modern warfare had well-nigh rendered further warfare impossible; or, if not going to that extreme, that future wars were bound to be short, sharp, and decisive. No nation could stand for more than a few months the staggering cost of modern warfare. If the threat of economic exhaustion did not suffice to prevent war, its actuality would cut short the term of any war once entered on.

Of the gigantic cost of modern war there was no exaggeration. But there was general failure to appreciate the economic power of nations to sustain this burden for years, indeed almost indefinitely, provided only that the people will it. It was not economic exhaustion that brought defeat to Germany, but the moral exhaustion and revolt of her people in combination wth her increasing military weakness.

Germany presented the most perfect example in modern history of a nation completely devoted to war: a people imbued with the spirit of war and conquest; a government supreme in its power over the people and with an organization of extraordinary completeness and perfection built up and directed with the single purpose of success in war. When such a nation goes to war, the expenditures of war are not a net addition to its cost of living. While engaged in the various activities of war, the people of necessity forego many of the instruments of peace, thus setting free resources available to meet the needs of war. The war largely cut off Germany's foreign trade. Many things formerly imported were now neither needed nor obtainable. Hence a possible source of saving. Germany's merchant marine found itself out of employ-

ment, and many of the other industries that had supplied the needs of peace were idle. Capital, thus temporarily unemployed, was ready to support the war, assuming only the proper credit machinery to make it available.

On the other side came the huge government demand for war materials, giving profitable employment to capital and labor just as fast as it could make the shift from its former peace employment. Business during the war, as in other countries, was generally prosperous. The nation's industry was diverted, more quickly and more completely in Germany than in any other nation, to the ends of war. The state became the one great customer. And, as is usual, the state paid well. To it the prime consideration was to obtain the goods; it did not higgle overmuch as to price. War profits were a well-known phenomenon in every belligerent nation, but nowhere so conspicuous as in Germany. Professor Rist gives a few examples in the automobile industry. The Benz company distributed dividends of 12 per cent the first year of the war and 20 per cent each year thereafter. In addition to a bonus of 10 per cent, its net profits rose from 3½ million marks in 1914 to over 15 millions in 1917, upon a capital of 20 millions. The Daimler Motors broke the record. With a capital of 8 million marks, it made profits of 12 millions in 1916, as compared with 3½ millions in 1913. Its annual dividend rates in the years since 1913 were 14 per cent, 16 per cent, 28 per cent, and 35 per cent respectively. It increased its surplus from 5½ to 8 millions. It amortized all its real property, entering it in its balance sheet at one mark. Finally in 1917 it quadrupled its capital, giving for each share held the right to subscribe for three new shares at 107, the market price being about 900 (pp. 73-74).

That the automobile industry was not alone in the good graces of the war god is shown by a table of the dividends of the corporations quoted on the Frankfurt exchange, published in the Frankfurt Gazette of November 6, 1917, as follows (p. 74):

28	manufacturers of machinery	14 per cent
22	electrical manufacturers	8 " "
29	collieries	13 " "
18	chemical concerns	17 " "
8	textile corporations	8 " "
15	banks	7 " "

By no means the least of the causes of this prosperity was the monetary inflation and the consequent rise of prices. On this point more will be said later. Here it is sufficient to recall (1) the fact that currency inflation was one of Germany's chief instruments of war finance and (2) the well-known economic principle that currency infla-

tion and rising prices tend always to stimulate industry and cause business profits.

So Germany made war a profitable thing to "big business." Her captains of industry were kept prosperous and in good humor. Their support could be counted on by the government. That cruel injustice was being done to the mass of the common people, whose cost of living was raised without corresponding increase of income, can scarcely have been unknown to the financial leaders. Patriotism and docile obedience to inspired propaganda were doubtless counted on to keep the people quiet. In the meantime industry flourished and the war was kept going—till at last the people would stand no more.

Proof of war profits is to be found in the huge sums which, after the first flurry of uneasiness at the war's beginning, flowed into the savings banks, the coöperative credit associations, the great deposit banks, and the stock market. The growth in savings-bank deposits is truly astonishing. Before the war the annual excess of deposits over withdrawals at the savings banks seldom exceeded 500 or 600 million marks. In the first five months of the war, in spite of the sudden heavy withdrawals at its beginning, the amount rose to 800 millions. In 1915 the excess of deposits reached the enormous figure of $3\frac{1}{2}$ billion marks. It was the same in 1916, $4\frac{1}{3}$ billions in 1917, and 6 billions in 1918. It should be noted that the German savings banks do not confine themselves so closely to the service of the small depositors as is the case in England, France, and America, and further that they perform more of an actual banking business (pp. 76-77).

The German coöperative credit associations perform an important service as agents of saving and investment. The agricultural societies, of the Raiffeisen type, had deposits of 79 million marks on December 31, 1913. This had risen to the extraordinary figure of 429 millions on December 31, 1917 (p. 78). During this time the societies had subscribed 660 millon marks to the first seven war loans.

As for the banks proper, the example is cited of the seven great banks of Berlin, whose standing deposit accounts grew from $4\frac{1}{3}$ billion marks on December 31, 1913, to over 19 billions on December 31, 1918 (p. 80).

There is not space to discuss further evidence presented by the author, such as the lively speculation on the stock markets, the creation of new corporations, and the increase of the capital stock of others, to which the banks were often heavy subscribers. In all of which is clearly seen the effect of war profits and frequently the evident desire to conceal the same. Indeed, the magnitude of these new capital issues aroused the alarm of the government, which feared the competition with its own loans. An edict of March 8, 1917, required that authority be obtained for all further issues, an arrangement found necessary also

by the United States and other belligerents. In this policy the government had the aid of the banks and the exchanges (pp. 82-83).

Thus we find the chief source of the German war loans in the normal savings and business profits of the war. It was the government's business to lay its hand upon all these resources. That it succeeded is proved by the results of the war loans already cited. The means by which it accomplished its ends will now be examined.

The loan policy of the imperial government comprised three principal features: (1) to permit the war savings of the people to accumulate through the normal channels of savings, (2) to absorb these savings into the imperial treasury by the issue, to the banks, the savings banks, the coöperative credit associations, and the large capitalists (both indivduals and corporations), of the government's short-time treasury bills (*unverzinsliche Schatzanweisungen*), and (3) every six months to fund this floating debt by means of a great war loan.

In carrying out this policy the government called to its service, by a masterpiece of skilful organization, all the regular institutions of saving, banking, and finance, foremost among which naturally stood the Reichsbank. From beginning to end, the imperial bank, under the leadership of its president, Havenstein, furnished the direction and the push of the government's financial policy. At the Reichsbank were placed the bulk of the imperial treasury bills, part being subsequently passed on to the other banks and savings institutions. Treasury bills and current claims against the government soon composed the bulk of the portfolios of the Reichsbank and the other banks. The former had almost ceased to furnish credit to private business and had become virtually the credit agent of the imperial government. The treasury bills and other drafts of the government were discounted by the Reichsbank at its official rate of 4½ or 5 per cent. Their title, "non-interest-bearing bills," must therefore not be understood to imply that through their use the government was able to finance its expenses without the payment of interest.

At no time have the proceeds of the war loans been sufficient to redeem the entire amount of treasury bills outstanding. Although a considerable reduction followed each loan, the floating debt increased steadily throughout the war. The portfolio of the Reichsbank, which it is agreed was composed almost entirely of treasury bills and other government advances, amounted to 4,712 million marks on September 30, 1914, after the close of subscriptions to the first loan. On October 7 it had dropped to 3,300 millions. By March, 1915, the time of the second loan, it had risen to 6,860 millions, followed by a drop to 4,341 millions. So after each loan the succeeding increase started from a higher point. The progression became rapid in the last half of the

war, and in October, 1918, the portfolio was just short of 19 billion marks.

By these means, thus briefly sketched, the imperial government was able to draw to its own uses the surplus capital and the savings of the people, with a magnitude, a regularity, and a lack of disturbance to the money market which enabled the German press (not without reason) to make each succeeding war loan the occasion of triumphant rejoicing.

The success of the imperial loan policy required not only the organization of the banks and financial institutions. It was necessary also to arouse in the people the desire to lend and to furnish the credit machinery to make lending easy. Of the nature of German propaganda, at home and abroad, the world is by now well aware. Professor Rist gives an interesting account of the means employed to arouse popular enthusiasm and support for the war loans. Space does not permit its further discussion here. But it reached every corner of the land and every owner of capital, from the banks and savings institutions, the great corporations and wealthy business men, fat with war profits, down to the poorest of the common people. The number and amount of the very small subscriptions to each loan furnish instructive evidence of the success of propaganda (*cf.* the interesting table on p. 95). Every nation employed such propaganda in aid of its war loans. Germany stands out only in the degree of completeness and energy with which its campaign was organized and carried out.

What more particularly demands our attention is the means employed to make liquid the possessions of the people, so as to make lending easy. Here again every existing agency was impressed into service, banks, savings institutions, insurance companies (which loaned to their policy holders upon their policies), and all the rest. But the institution that stands out above all the others, as perhaps the most original and remarkable of all Germany's war devices, is the system of imperial loan bureaus (*Darlehnskassen*). These credit institutions had their origin in Prussia in 1848 and were revived during the wars of 1866 and 1870. At the beginning of the war in 1914, provisions for the establishment of these offices all over the country were quickly made. Ninety-nine offices were established (p. 45). Their purpose was to supply easy credit by making loans on securities or merchants' stocks. They made advances to merchants, manufacturers, banks, savings banks, coöperative credit associations, and finally to individuals. They soon came to be the principal source of credit for all classes of borrowers, including the banks themselves and even the cities and the separate states, which had been forbidden to make appeal to to the public savings in competition with the imperial loans. This explains how, as mentioned above, the Reichsbank was able to sever

so completely its connection with the nation's industry. It was the loan bureaus that supplied the credit needs of every agency except the imperial government. To its exclusive service the Reichsbank devoted itself.

The means by which the imperial loan bureaus made their loans was through the issue of their own notes (*Darlehnskassenscheine*). These notes were the most original and, as the event has shown, the weakest stone in the German credit structure. In character they were similar to the imperial treasury notes (*Reichskassenscheine*), which were in existence in moderate amount (generally not exceeding half a billion marks) before and during the war but which were not relied upon for war financing. The loan-bureau notes were issued in denominations as low as one mark. They were not legal tender, but the fact that they were receivable at their face value at all public offices of the empire and the federated states assured their circulation. And finally, where appears the true inwardness of their nature, they could be counted by the Reichsbank as part of the cash reserve against its own notes.

The procedure now becomes simple enough. Through all the channels of propaganda, so skilfully used by the imperial leaders, the people were urged to borrow freely of the *Darlehnskassen* in order to subscribe to the war loans. The operation was pictured as profitable on account of the slight difference between the rate of yield on war-loan bonds and the rate of discount charged by the loan offices—5.36 per cent and 5.25 per cent respectively (pp. 104-5). Even more strongly was the operation urged as a patriotic duty. The loan offices made lending easy. Credit could be obtained on a great variety of securities without the necessity of suffering the heavy loss involved in sale upon the disordered stock market. No possessor of capital not actually used in his own business had any excuse for failure to subscribe to the extent of his investments.

At first sight it seems very strange that trouble should have been taken to set up all this elaborate machinery for performing what was after all a simple banking function, which it would seem might have been handled by the Reichsbank in coöperation with the other banks of the country. The explanation of this anomaly gives us an insight into the essentially hypocritical character of the German credit currency. Two considerations must be noted. In the first place it is to be remembered that the German law permitted its banks of issue to emit notes only on the security of cash or commercial paper, though the law was changed so as to permit loans to the state (pp. 45-6). The imperial loan bureaus on the other hand were permitted and expected to loan freely upon securities and merchants' stocks, and they could issue their own notes to meet their loans. The second consideration is even more significant. The Reichsbank's rule requiring a cash reserve

of 33 $1/3$ per cent against its note issue was held in high repute by the financial leaders of the empire, who considered its preservation during the war a matter of the utmost importance. But the war plans required assistance to the imperial treasury in the form of credit currency far in excess of the power of the Reichsbank to issue while keeping this reserve ratio intact. Hence the ingenious device of the *Darlehnskassenscheine*, whereby it was easy to eat the fiduciary cake and have it too. The loan bureaus could issue their notes virtually without limit as to amount or cash reserve. A large part of their notes was not issued to their customers at all but exchanged in advance with the Reichsbank for the notes of the bank. In fact it was the notes of the Reichsbank that were issued to the public and went into circulation. The loan-bureau notes served as cash reserve for the Reichsbank (law of Aug. 4, 1914) and so permitted the issue of its own notes in any desired amount without sacrificing the sacred one-third ratio.

By this original device the imperial authorities undertook to conceal the real nature of the monetary inflation upon which they relied for financial support of the government. And the inflation thus made easy was one of the chief causes of Germany's loss of the war and her present low state. The figures of the monetary inflation are appalling. On July 23, 1914, the fiduciary circulation amounted to 2,095 million marks, made up of 1,890 million Reichsbank notes and 205 million imperial treasury notes.[3] Just before the close of hostilities, November 7, 1918, the circulation had reached the huge total of 27,418 millions, consisting of 17,454 millions of Reichsbank notes, 354 millions of treasury notes, and 9,610 millions of loan-bureau notes.[4] The reckless issue of paper money was not checked by the armistice. On December 31, 1919, the amounts outstanding were: Reichsbank notes, 35,698 millions; imperial treasury notes, 332 millions; and loan-bureau notes, 13,598 millions; making a total of 49,628 millions, 24 times the amount at the beginning of the war (pp. 146-7).

The authorities were hard put to it to explain this enormous increase of the fiduciary circulation, particularly in face of the rising price level and the decline in German exchange. Various excuses were alleged, such as the need of currency to replace the gold turned into the Reichsbank by the public since the beginning of the war, the need of currency for the occupied territories, the notes absorbed by the troops in the field, and the growing habit of the people to make payments in cash—every reason, in fact, except the real one, the steadily increasing advances of the Bank to the Treasury. The comparison with the enemy countries was disquieting and had to be explained away. The contrast with England, where inflation was kept within narrow bounds, was

[3] *The Economist*, Aug. 8, 1914, p. 292.
[4] *Ibid.*, Nov. 30, 1918, p. 738.

brushed aside with mere reference to the different habits of the British as to payments. Even in France, where inflation was by no means modest, the notes of the Bank of France had increased only from 5,433 million francs on July 31, 1914, to 30,617 millions on December 31, 1919, an increase of only 5½ times.

The common impression that by means of the *Darlehnskassenscheine* a way was early provided for an expected unlimited issue of Reichsbank notes was a mistake. Actually the Reichsbank at the first regarded this as an expedient to be used only in case of dire necessity. It took care in its balance sheet to distinguish meticulously its *metallic* money from its paper money. It made it a point of honor not to count the paper in its reserve or to issue more notes than would be lawful on the basis of its metallic reserve only. This up to the end of 1916. Even here there was a certain lack of sincerity, through failure to count in the notes outstanding the imperial treasury notes and the *Darlehnskassenscheine.* Including these items, the metallic reserve fell below the one-third ratio at the end of 1915 and at the end of 1916 was scarcely over 22 per cent. But on December 23, 1916, even the Reichsbank notes were beyond the line, 7,735 million marks being covered by 2,519 millions of metallic reserve, a ratio of 32½ per cent (pp. 146-8). During 1917 the sacred ratio was definitely lost, and after that the collapse was rapid and complete. The metallic reserve stood at 22 per cent on December 31, 1917, 10 per cent on the last day of 1918, and 3 per cent on December 31, 1919. The importance attached to the one-third metallic ratio is clearly evident in the failure to acknowledge its loss. From that time the journals discontinued completely the publication of the ratio of metallic reserve to notes, so religiously calculated theretofore (pp. 148-9).

Monetary inflation brought in its train rising prices and falling exchanges. Professor Rist devotes two interesting chapters (chapters 5 and 6) to this subject. As in other situations, the authorities sought by propaganda to put a good face on the matter. The rise of prices, when no longer to be denied, was explained as due to natural causes quite unconnected with the fiduciary circulation. It was stoutly asserted by the pliant authorities and editors that the German mark was worth exactly as much as before the war. Other circumstances, the government demand, the British blockade, etc., had caused the high prices at home and the low value of mark exchange abroad. There were, it is true, those who could not accept this explanation. The German economists for years before the war were much interested in questions of the economic theory of money. Now these discussions broke out anew; our old friend, "the quantity theory," had its hour in the spotlight, and there were vigorous polemics, in the good old

German style, between the "metallists" and the "anti-metallists" (pp. 137-8, 149-55).

The Reichsbank, while studiously denying depreciation of the mark, was nevertheless taking urgent measures to maintain its value. Its first care was to build up its gold reserve. This policy was initiated before the war, notably after the Agadir crisis in 1911. It was carried on vigorously till the year 1916. The bank bought foreign gold. A vigorous campaign gathered in the gold from general circulation, aided by authority to issue Reichsbank notes in denominations of 20 and 50 marks; before the war the limit was 100 marks. The public was educated to make payments in notes rather than gold and responded obediently. By such means 400 million marks were added to the Reichsbank's gold reserve in the two years 1912 and 1913. The last statement before the war (July 23, 1914) surpassed all hopes. Against a note issue of 1,890 million marks the bank held a reserve of 1,756 millions, of which 1,691 millions was in metal, a metallic reserve of nearly 90 per cent (p. 33).

Almost immediately after the beginning of hostilities the bank suspended gold payments, and, thanks to the voluntary delivery of gold by the public, the gold reserve continued to mount steadily, reaching the remarkable figure of two and a half billions in the summer of 1917 (June 15). This was the maximum. The force of public contributions had now spent itself, and from this date the gold reserve declined. In the meantime, the note issue was increased prodigiously. A billion marks were added in the last week of July, 1914, and another billion in the first week of August, thus starting an avalanche of notes destined to continue all through the war and down to the present day (pp. 36-37, 140). In spite, therefore, of the absolute increase in the gold reserve, the ratio of gold to notes fell swiftly from the 90 per cent on July 23, 1914, to less than the legal 33 $\frac{1}{3}$ per cent, in December, 1916.

Now the policy changed. A nation-wide campaign to educate the people in the use of checks was inaugurated. This meant a revolution in habits, payments having been made almost exclusively in notes and coin. The results were slow but material. For example, the number of checking accounts rose from 133,000, with an average of 270 marks on deposit, at the beginning of 1916, to 275,000, averaging 979 marks, in September, 1918. The government also changed its policy by obtaining its advances from the Reichsbank in deposit credit in preference to notes (p. 164).

The officers of the Reichsbank and of the government must have understood perfectly that this substitution of one form of credit currency for another was powerless to relieve the monetary situation. Clearly the policy was aimed solely at allaying the uneasiness of the

public, who, ignorant of the essential identity of notes and deposits, would take courage from the decline of notes while overlooking the rise of deposits. Of course, all this had no effect on prices.

Finally, measures were taken to reduce the circulation by bringing back from the occupied territories of Belgium and Poland the large volume of Reichsbank notes put into circulation there as part of the earlier policy. When Roumania was later occupied, Reichsbank notes were not circulated there (pp. 155-160).

The weakest feature of the German war finances was the lack of a vigorous tax policy. For a generation before the war Germany had held a leading place among the nations of the world in the development of tax technique. Yet the burden of taxation was lighter in Germany than in most other countries. The total of all taxes, national, state, and local, in Prussia in 1902 was estimated at 42.50 marks per capita. In France it was 79.57 marks and in Great Britain, 101.44 marks. During the decade preceding the war, the burden increased in Germany faster than in France, but the comparison still favored the German taxpayer. In 1913 the average Prussian subject paid 33 marks in taxes to the empire, 17 to the state, and 18.40 to the commune and the circle, 68.40 marks in all, estimated at 10 per cent of his income. The French taxpayer paid 135 francs (101 to the state and 34 to the department and the commune) being 15 per cent of his income. It is scarcely necessary to remind the reader that Germany's moderation in taxes did not mean a niggardly budget. Receipts from industrial enterprises furnished 30 per cent of the imperial gross revenue and 67 per cent of the revenue of the federated states, besides contributing handsomely to local needs (pp. 111-115).

The German plan of war finance had evidently been carefully worked out in advance. It was clearly stated by Helfferich in his budget speech to the Reichstag on March 10, 1915 (p. 118). Taxes were not to be relied upon except in so far as they might be required to meet interest on the war loans. The cost of war was to be covered entirely by loans and the issue of notes by the Reichsbank.

One recognizes here the so-called "Gallatin plan" of war finance, first definitely formulated by the United States Secretary of the Treasury during the War of 1812, adopted, with disastrous results, in that war, and justly regarded since then as a policy of weakness. That the German authorities, with their long and thorough study of every aspect of war economy, with their meticulous prevision of every detail of their policy of loans and currency, should have fallen so completely into the pitfall of a weak tax policy has seemed an anomaly difficult to explain. The answer is to be found in two considerations, one well known, the other little appreciated outside the circle of students of public finance.

As to the first, everyone knows that all the German plans were pre-

dicated upon the assumption of a quick, decisive victory on the field of battle. The war was to be a short and extraordinary effort, demanding the utmost of every department of the national life and quickly crowned with victory. The disturbing element of war taxes was to be avoided. It would not be necessary; loans would furnish the sinews of war. After the victory would be time enough to count the cost and make suitable settlement. An indemnity would assist and, in any event, the joy of victory would sugar-coat the pill of taxation, so far as that bitter medicine might prove necessary. The sole concession was to provide by taxation for interest on the war loans. This policy had just one chance of success. In default of the expected quick victory, it was foredoomed to failure. Moreover, the lesson of history gave clear warning against over-optimistic hopes. The United States made that mistake in the Civil War. So did Great Britain in the South African War. Each nation paid dearly for her optimism. And so it befell with the German war plans. The conflict dragged on. Even the requirements of interest on war loans reached before the end the huge sum of 5½ billion marks (p. 119). And ultimately the great credit machine broke down under the impossible burdens placed upon it.

The meaning of all this is clear enough. It was understood before the war by the leaders in every other nation. Great Britain made unprecedented demands upon her taxpayers from the start. The United States was equally courageous. Even France, handicapped by a weak and obsolete tax system and with no love of taxes, did not turn her back upon taxation in the German fashion. It is impossible to believe that the German authorities were ignorant of these simple principles of war finance. It is at least difficult to believe that they would thus have staked their all upon one long chance unless compelled thereto by some other powerful consideration.

In the opinion of the reviewer the explanation is to be found in the constitutional weakness of the imperial government in the matter of taxation, and Professor Rist brings the point out clearly (p. 121).

When the empire was established, difficulty was experienced in finding for it a revenue system of sufficient magnitude and independence. The several states had already appropriated to themselves the most fruitful sources of revenue and, in spite of the important functions assigned to the new imperial goverment, the states were unwilling to make any material concessions. So the constitution marked out the financial boundary: direct taxation and industrial earnings to the states, indirect taxes to the empire. Deprived thus of the most effective sources of revenue, the empire has faced a continual struggle to make both ends meet. The states, the ancient stronghold of reaction and privilege, fought every move to strengthen the imperial finances at their expense. The empire was forced by growing expenses to cultivate

to the utmost the field of indirect taxes. Only twice was the empire permitted to invade the sacred domain of direct taxation. In 1906, the succession taxes were given over to the empire, and in 1913, with a boldness that should have advertised Germany's war plans to the world, the *Wehrbeitrag* (extraordinary defense contribution) and the *Vermoegenszuwachssteuer* were established (p. 123).

So Germany girded herself for war, seemingly prepared at every point, but with one fatal weakness in her armor, the inability to levy direct contribution upon the wealth and incomes of her people. With the public already restive under the burden of multiplied indirect taxes, with the states still obstinately defending their ancient monopoly of direct taxation, necessity pointed the path for the imperial government. Borrowing was the only recourse.

To the American student this lesson is of especial interest, on account of our own similar experience. The Constitution of the United States virtually deprived the federal government of recourse to direct taxation through the rule that such taxes must be apportioned among the states according to their population. Up to the time of the Civil War, indeed, the government had failed to make effective use even of indirect taxation outside of customs duties on imports. Hence it is not surprising that the financing of the Civil War, as of the War of 1812, grounded on the rocks of insufficient taxation. Direct taxes, under the Constitution rule, were tried and failed. A new system of indirect taxes did not get well started till near the war's close. It is an interesting, though uncomfortable, exercise to speculate upon the probable fate of our national finances in the World War if the sixteenth amendment had not just in the nick of time led to the establishment of an efficient federal income tax.

The imperial German budget during the war was divided into two parts, the extraordinary war budget, to be covered entirely by loans, and the ordinary budget, including interest, which it was hoped would be met by taxes. In spite of economy in other ordinary expenditures, the rapid growth of the interest charge soon made impossible the task of balancing the budget without asking any contribution from the taxpayer. But, in spite of alarming deficits, the original plan was not abandoned till 1917, with the resort to direct taxation in the form of the *Kriegsteuer*. Other taxes followed, which are described in detail by Professor Rist (pp. 125-136), but which must be passed over here. The change of policy came too late to save the day, already lost in the flood of paper money. The evidence as to the yield of taxes is obscure and conflicting. Professor Rist estimates that at the very outside the per capita burden of all taxes did not much more than double between 1914 and 1918, during which period the imperial taxes were certainly not more than trebled. Considering the easy position of the German

taxpayer in 1914 and the depreciated currency in which the 1918 figures are expressed, this is moderate indeed.

For the future the most significant result of Germany's tax experience was the final triumph of the empire over the states. In the new Constitution, following the military debacle and the political revolution, we find the financial revolution accomplished. Henceforth the imperial government has sole authority in the field of direct taxation, including the income tax, formerly the backbone of the state tax systems. And the railroads, once the chief source of industrial earnings, are likewise taken from the states and bestowed upon the imperial government. Henceforth the states and communes must occupy the position of financial dependence, supported by fixed shares in the great imperial direct taxes.

From the beginning the German leaders looked forward to war indemnities as the means by which the vanquished should pay the victor's war costs, the rôle of victor being of course played by Germany. In an interesting chapter devoted to this subject, Professor Rist summarizes the writings of various German authorities before and during the war, whose happy anticipations in 1915 were illustrated by the exclamation of Lamprecht and List: "It is a joy to be living in these times of ours." To this the author remarks dryly that "since 1915 the joy of living has considerably diminished in Germany" (p. 216).

The most important part of this chapter is that which deals with the prospects of German reparation payments to France. On this topic Professor Rist speaks with such sound common sense and such clear understanding of economic principles that one could wish his book had more influence upon French public opinion.

The futility of expecting a huge indemnity in gold is shown. Aside from a moderate stock of gold and foreign securities, Germany's capital consists of her lands and buildings, her factories and mines. Even though title to these be given to the Allies, the capital itself is not physically removed. The titles are good only to the extent that the product of German industry is sufficient to pay interest and dividends. Only in German products can Germany pay an indemnity. And the Allies can receive payment in only two forms, either in German products or in bills of exchange on other countries to which German products have been sold. In either case Germany's ability to pay is dependent upon her foreign trade. The "boycott" of German goods is incompatible with the collection of indemnity. The "economic war" may be a useful diplomatic weapon in time of war; it has no place after the enemy's defeat except to serve the selfish interests of individuals. And this leads directly to the obvious conclusion that protectionism and indemnity can not work in double harness. The

absorption of this uncomfortable economic principle is one of the first steps necessary to the world's economic recovery.

The last chapter, "Since the Armistice," and the appendix describing "Germany's Financial Situation in July, 1920," are interesting reading, in particular the discusson of the ambitious and courageous plans by which the ill-fated Erzberger hoped to restore financial order. This, however, is really part of another story, whose end is not yet in sight. Detailed review of Professor Rist's discussion, already partly out of date, would not be worth while. The two outstanding features of Germany's *post bellum* finances are the failure to balance the budget and the reckless issue of paper money. The budget for 1920, according to the official figures presented by Finance Minister Wirth to the National Assembly on April 26, 1920, showed expenditures of 55 billion marks and receipts of 25 billions, an expected deficit of 30 billions (pp. 276-8). A summary of the 1921 budget made in December[5] indicated total expenditure of 234 billion marks, revenues of 72 billions, and a consequent deficit of 162 billions to be covered by loans. A preliminary estimate of the budget for 1922 made in February[6] shows a deficit to be covered by credit operations amounting to the enormous sum of 183 billion marks. If past experience is any guide, this figure is very likely to be increased.

As we should expect, the accompaniment of this deficit financing is reckless paper-money inflation. The circulation of Reichsbank notes before the war was less than two billion marks (1,890 million marks on July 23, 1914). At the close of hostilities the circulation was 17½ billions (on November 7, 1918). During the next year this huge sum was doubled (35,698 million marks on December 31, 1919). It doubled again in 1920 (68,805 million marks on December 31, 1920) and all but maintained the geometrical progression in 1921, the figure standing at 113,639 millions on December 31, 1921.[7] On February 15, 1922, the sum of 115,755 millions had been reached.[8] The increase from two to sixteen billions during the war was impressive enough. But that was only a beginning. Scarcely more than three years of peace have witnessed an eightfold increase of the unprecedented figure of October, 1918. The final chapter of Germany's war finance is a record of unbalanced budgets and paper-money inflation. What the end will be remains to be seen.

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[5]*The Economist,* Dec. 17, 1921, p. 1067.
[6]*Ibid.,* Feb. 18, 1922, p. 279.
[7]*Ibid.,* Jan. 14, 1922, p. 62.
[8]*Ibid.,* Feb. 25, 1922, p. 427.